

REMARKS

Claims 9-15, 17-19, 21, 22, 29-34, 36, 37 and 39 are in the application, with Claims 9, 15, 19, 29, 34 and 37 having been amended, and with Claims 1-8, 16, 20, 23-28, 35 and 38 having been cancelled. Claims 9, 15, 19, 29, 34 and 37 are the independent claims herein. No new matter has been added. Reconsideration and further examination are respectfully requested.

Claim Rejections Under 35 USC § 102(b)

Claims 9-14 and 29-33 are rejected as being anticipated by Rokugawa et al., U.S. Patent No. 6,441,314 ("Rokugawa").

Claim 9, as now presented, is directed to an "article of manufacture" which includes "a substrate" and "a coverlay laminated to the substrate". Claim 9 further recites that the coverlay "ha[s] at least one opening formed in the coverlay by photolithography" and is "in contact with the substrate". The latter limitation has been added in this amendment and is supported by FIG. 1 (showing coverlay 38 in contact with the substrate 12).

From the discussion at paragraph 4 on page 2 of the pending Office Action, it appears to applicants that the Examiner considers one of the insulation layers 14 in the Rokugawa reference to satisfy the claimed "substrate" and another superposed insulation layer 14 to satisfy the claimed "coverlay".

At the outset, applicants respectfully remark that it is doubtful that the superposed insulation layers 14 of Rokugawa are "laminated" to each other, as called for in claim 9. Rather, judging from column 7, lines 9-13, it appears that each insulation layer is formed by being applied by printing or the like, and is then cured in place. (See also column 7, lines 59-61.) This is not a lamination process, and it is therefore applicants' contention that the Examiner's interpretation of "laminated" as including the process of the Rokugawa reference is unreasonably broad.

In any case, and to more sharply distinguish claim 9 from Rokugawa, claim 9 has been amended to recite that the coverlay is in contact with the substrate. To the contrary, in the

substrate structure shown in FIG. 1 of Rokugawa, the superposed insulation layers 14 are not in contact with each other.

For both of these reasons, it is respectfully submitted that the rejection of claim 9 should be reconsidered and withdrawn.

The above remarks are also applicable to claims 10-14, which are dependent on claim 9, and to independent claim 29 and its dependent claims 30-33.

Claim Rejections Under 35 USC § 103(a)

Claims 15, 17, 18, 34 and 36 are rejected as being unpatentable over Rokugawa in view of Fox et al., U.S. Patent No. 5,128,831 ("Fox").

Claims 19, 21, 22, 37 and 39 are rejected as being unpatentable over Rokugawa in view of Fox in view of Blumenau et al., U.S. Patent No. 6,421,711 ("Blumenau").

Claim 15 is directed to an "article of manufacture" which includes "at least two integrated circuit (IC) packages in stacked relation to each other". Claim 15 also recites that each of the IC packages includes "a substrate", "an IC mounted on a surface of the substrate" and "a coverlay laminated on the surface of the substrate". Claim 15 further specifies that the coverlay "ha[s] at least one opening formed by photolithography". The article of manufacture claimed in claim 15 also includes "at least one conductive connection formed through one of the coverlays and connecting one of the ICs to another of the ICs". In addition, claim 15 recites that "each IC is positioned in an opening of a respective one of the coverlays, the opening formed by photolithography, all of said each IC being in said opening of said respective one of the coverlays".

It is noted that claim 15 has been amended to incorporate the limitations of former claim 16. Further, a new limitation has been added to the effect that all of each IC is in the opening of the respective coverlay. Support for this limitation is found in FIG. 4 (the entirety of IC 106 is in each case within the central opening--indicated by reference numeral 40 in FIG. 1--in the coverlay 38).

The above remarks concerning the absence of "lamination" in Rokugawa are also applicable to claim 15. Furthermore, it is respectfully urged that no part of the semiconductor

device 16 in Rokugawa, not even the electrodes 18 of the device 16, can properly be said to be in the hole 30 in the insulation layer 14 of the reference. Indeed, Rokugawa states at column 9, lines 44-47, that the holes 30 are completely filled with a copper layer, which would prevent the semiconductor device from being therein.

In any case, applicants believe that it is beyond dispute that, even if the reference could be interpreted to show part of an IC in a hole 30, Rokugawa does not show all of an IC (semiconductor device 16) being in the hole 30. It is believed that claim 15 is patentably distinguished from the references relied upon by the Examiner, since claim 15, as amended, recites all of an IC being in the opening of a coverlay.

Claims 19, 34 and 37 have been amended in a similar manner to claim 15 and are submitted as patentable on the same basis as claim 15. The claims dependent on 15, 19, 34 and 37 are also submitted as patentable on the same basis.

CONCLUSION

Accordingly, Applicants respectfully request allowance of the pending claims. If any issues remain, or if the Examiner has any further suggestions for expediting allowance of the present application, the Examiner is kindly invited to contact the undersigned via telephone at (203) 972-3460.

Respectfully submitted,



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